

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Kenneth Lawrence Accardi et al.

Serial No.: 09/224,262
Filed: December 31, 1998For: MEDICAL DIAGNOSTIC SYSTEM
REMOTE SERVICE METHOD AND
APPARATUS§
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§

Group Art Unit: 2171

Examiner: Chen, Te Y.

Atty. Docket: 15-SV-4834/YOD
(GEMS:0038)

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Tait R. Swanson

APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 1.191 AND 1.192

Appellants file this Appeal Brief in furtherance to the Notice of Appeal mailed on August 25, 2003, and received by the Patent Office on August 29, 2003.

As discussed in detail below, the Appellants believe the Examiner has expended unnecessary time and resources, both of the Patent Office and Appellants, with unreasonable rejections and incomplete readings of the prior art and the present claims. In the Final Office Action, the Examiner's Section 102 rejections clearly misinterpret certain features, such as *standard service functions* associated with *service requests*, as recited in the present claims. The Examiner also misinterpreted the cited reference, Derzay et al., U.S. Patent No. 6,434,572 B2 (hereinafter "Derzay" or "the Derzay reference"). As discussed in detail below, the Derzay reference discloses only *custom* service requests having general problem area *identifiers* 206 (not functions), which may be listed on a service request form 202. See Derzay, Fig. 8, Col. 13, line 66 – Col. 14, line 8. In view of these misinterpretations, the Appellants emphasize the Examiner's failure to interpret the claims in the broadest reasonable manner, which is consistent with regard to the scope of the present application and with regard to the interpretation that those of ordinary skill in the art would reach. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); see also *In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); see also *In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); see also M.P.E.P. §§ 608.01(o) and 2111. Moreover, the Appellants stress that the prior art reference must show the *identical* invention "in as complete detail as contained in the ... claim" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

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For these reasons, Appellants submit that the Derzay reference does not inherently disclose the foregoing features, as recited in claim 23.

Request Withdrawal of Rejection of Claims 23-28

In view of these omitted features, the Derzay reference cannot anticipate the pending claims. For these reasons, Appellants respectfully request withdrawal of the foregoing rejection of claims 23-28 under 35 U.S.C. 102(e) as anticipated by the Derzay reference.

9. **CONCLUSION**

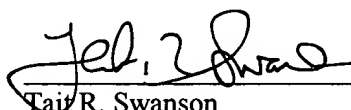
In view of the above remarks, Appellants respectfully submit that the Examiner has provided no supportable position or evidence that claims 1-28 are obvious under the judicially created doctrine of obviousness type double patenting or anticipated by Derzay et al. under 35 U.S.C. § 102. Accordingly, Appellant respectfully requests that the Board find claims 1-28 patentable over the prior art of record and withdraw all outstanding rejections.

Fees and General Authorization for Extensions of Time

In accordance with 37 C.F.R. § 1.136, Appellants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefor. Appellants hereby request a one (1) month extension in the statutory period for response from October 29, 2003 to November 29, 2003 in accordance with 37 C.F.R. § 1.136. The Commissioner is authorized to charge the requisite fee of \$110.00 for the (1) month extension of time, the requisite fee of \$330.00 for this appeal brief, and any additional fees which may be required, to Account No. 50-2402, Order No. 15-SV-4834/YOD (GEMS:0038).

Respectfully submitted,

Date: December 1, 2003



Jay R. Swanson
Reg. No. 48,226
FLETCHER YODER
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545

The Appellants also note that the Derzay reference falls under Section 102(e) and both the present application and Derzay were, at the time the invention was made, owned by, or subject to an obligation of assignment to, General Electric Company or one of its subsidiaries, such as GE Medical Technology Services, Inc. For this reason, in accordance with 35 U.S.C. § 103(c) and M.P.E.P. § 706.02(I), if an obviousness type rejection were formulated in view of Derzay, the Appellants respectfully submit and request that the Derzay reference would be removed from consideration, thereby obviating the obviousness rejection.

For these reasons, as set forth in further detail below, Appellants respectfully request that the Board find claims 1-28 patentable over the prior art of record and withdraw all outstanding rejections.

1. **REAL PARTY IN INTEREST**

The real party in interest is General Electric Company. The inventors/Appellants named in the above-referenced application are subject to an obligation of assignment to General Electric Company or one of its subsidiaries, such as GE Medical Technology Services, Inc. Accordingly, the Board's decision in the pending appeal will directly affect General Electric Company.

2. **RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellants' legal representative in this Appeal.

3. **STATUS OF CLAIMS**

Claims 1-28 are currently pending, and claims 1-28 are currently under final rejection and, thus, are the subject of this appeal.

4. **STATUS OF AMENDMENTS**

The Appellant has not submitted any amendments subsequent to the Final Office Action mailed on May 1, 2003.

5. **SUMMARY OF THE INVENTION AND OF THE DISCLOSED EMBODIMENTS**

In the medical field, a variety of imaging systems facilitate the diagnosis of patients. *See* Application, Background, Page 2, lines 16-29. Due to the demanding schedules often imposed on these imaging systems, it is often important that the systems remain in proper working order and available when needed for patient diagnosis. *See* Application, Background, Page 3, lines 1-3. Accordingly, it has become customary to provide highly trained service personnel for monitoring operation of the diagnostic systems and scheduling servicing of

hardware, firmware, and software within the systems to minimize downtime. *See* Application, Background, Page 3, lines 3-6. Increasingly, these service personnel address servicing problems remotely through a network connection. *See* Application, Background, Page 3, lines 8-11. For example, a person at the medical institution may notify the service personnel of a general problem area, which may require a variety of servicing as *subsequently determined* by the service personal. *See generally* Application, Background, Page 2, line 16 – Page 4, line 11. One approach to remote servicing also involves an automated service center, which can access operational data from the diagnostic systems and use the data to evaluate the operating state of the systems. *See* Application, Background, Page 3, lines 13-20. Using this data, the remote servicing personnel can more efficiently and successfully troubleshoot the systems. *See* Application, Background, Page 3, lines 22-30. However, the particular problem may still be difficult to ascertain, particularly where the service personnel are given only limited or broad problem area identifiers and descriptions. *See generally* Application, Background, Page 2, line 16 – Page 4, line 11.

The subject matter disclosed and claimed in the present application addresses these drawbacks in a unique and advantageous manner, which involves the use of a *standard service function* associated with a service request. *See* Application, Summary, Page 4, lines 14-31. Accordingly, a user may identify a standard service function while composing a service request, which may be handled automatically by an automated service module 92 or personally by a service engineer at a field service unit 24. *See* Application, Detailed Description, Page 10, line 30-Page 11, line 12. For example, a person at the medical institution may identify and select a standard service function from a list of service functions on a service request form, which is then electronically transferred to the automated service module 92 and/or the field service unit 24 for processing. *See* Application, Summary and Detailed Description, Page 4, lines 14-31; Page 10, line 30-Page 11, line 12; Page 12, lines 13-31. In either case, the standardization of common service functions expedites servicing of typical problems and needs associated with a particular imaging system. *See generally* Application, Summary and Detailed Description, Page 4, lines 14-31; Page 10, line 30-Page 11, line 12. Otherwise, each individual problem would require specialized or customized attention leading to delayed response times and, thus, increased downtime for the imaging system. *See id.*

6. **ISSUES**

Issue No. 1:

Whether claims 1-28 are unpatentable under the judicially created doctrine of double patenting as obvious over claims 1-44 of co-pending application Serial No. 09/199,506.

Issue No. 2:

Whether claims 1-28 are unpatentable under 35 U.S.C. 102(e) as anticipated by Derzay et al., U.S. Pat. No. 6,434,572 B2 (hereinafter "Derzay" or "the Derzay reference").

7. **GROUPING OF CLAIMS**

- Group I: Independent claim 1 and dependent claims 2-7 will stand or fall together.
- Group II: Independent claim 8 and dependent claims 9-15 will stand or fall together.
- Group III: Independent claim 16 and dependent claims 17-22 will stand or fall together.
- Group IV: Independent claim 23 and dependent claims 24-28 will stand or fall together.

8. **ARGUMENT**

Issue No. 1:

In the Final Office Action, the Examiner provisionally rejected claims 1-28 under the judicially created doctrine of double patenting over claims 1-44 of co-pending application Serial No. 09/199,506. Appellants believe that the claims are patentable over the co-pending application, but would file a Terminal Disclaimer if necessary to overcome the rejection in the event that the Board withdraws the remaining rejections under Section 102. Appellants also emphasize that should the present claims issue prior to the claims identified by the Examiner, any need to file a Terminal Disclaimer would, in the Appellants' opinion, be obviated.

Issue No. 2

In the Final Office Action, the Examiner rejected independent claims 1, 8, 16, and 23 and dependent claims 2-7, 9-15, 17-22, and 24-28 under 35 U.S.C. 102(e) as anticipated by the Derzay reference. Appellants traverse these rejections and request the Board withdraw the outstanding rejections for the reasons set forth below the following legal precedent.

Legal Precedent

First, anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, the Appellants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention "*in as complete detail as*

contained in the ... claim” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Second, regarding claim interpretation, the claims must be given their broadest reasonable interpretation consistent with the specification. *See In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); *see also In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); *see also* M.P.E.P. §§ 608.01(o) and 2111. Interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *See In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); *see also* M.P.E.P. § 2111. As further explained in Section 2111.01 of the M.P.E.P., the words of the claim must be given their plain meaning unless the applicant has provided a clear definition in the specification. *See In re Zletz*, 893 F.2d 319, 321, 13 U.S.P.Q.2d 1320, 1322 (Fed. Cir. 1989). Again, the plain meaning refers to an interpretation by those of ordinary skill in the art. *See In re Sneed*, 710 F.2d 1544, 218 U.S.P.Q. 385 (Fed. Cir. 1983).

Third, regarding the theory of inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *In re Robertson*, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999) (Emphasis Added). The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. *Id.* In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Examiner, in presenting the inherency argument, bears the evidentiary burden and must adequately satisfy this burden. *See id.* Regarding functional limitations, the Examiner must evaluate and consider the functional limitation, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. *See* M.P.E.P. § 2173.05(g); *In re Swinehart*, 169 U.S.P.Q. 226, 229 (C.C.P.A. 1971); *In re Schreiber*, 44 U.S.P.Q.2d 1429, 1432 (Fed. Cir. 1997). If the Examiner believes the functional limitation to be inherent in the cited reference, then the Examiner “must provide some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Inter. 1986).

Fourth, the *drawings* of the cited reference must be evaluated for what they *reasonably disclose and suggest* to one of ordinary skill in the art. *In re Aslanian*, 590 F.2d 911, 200 U.S.P.Q. 500 (CCPA 1979).

GROUP I: Independent Claim 1 and Dependent Claims 2-7

Claims

In view of the foregoing legal precedent and summary of problems and solutions provided by the present application, independent claim 1 recites:

A system for providing field service to medical diagnostic equipment, the system comprising:
a medical diagnostic station configured to store medical image data;
a field service unit configured to generate *service requests* for operational servicing of the medical diagnostic station, identifying a *standard service function from a plurality of service functions* and a unique identifier for the medical diagnostic station; and
a service facility configured to be coupled to the medical diagnostic station and to the field service unit via network links, the service facility including a service request management device for receiving the service requests from the field service unit, accessing data stored at the medical diagnostic station as defined by the *standard service function*, and transmitting data to the field service unit in response to the service request.

As set forth above, claim 1 is clearly directed toward a *standard service function* associated with a *service request*. In context of the claim as a whole, the claim feature of a “standard service function” clearly refers to a function associated with servicing of the medical diagnostic station and, more particularly, a standard function for servicing in which stored data is specifically accessed according to the standard service function. Appellants also emphasize that the claim features, including the standard service function, must be interpreted reasonably and consistently within the scope of the specification and within the understanding of one of ordinary skill in the art. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969). In view of the specification, the broadest reasonable and consistent interpretation of a standard service function is a predefined or standard function (*not custom*) associated with servicing the medical diagnostic station. Moreover, the broadest reasonable and consistent interpretation that one of ordinary skill in the art might adopt would not ignore the terms *standard* and *function*. Thus, one of ordinary skill in the art would most reasonably and consistently interpret the claim feature “standard service function” as a predefined or standard function (*not custom*) associated with servicing the medical diagnostic station. For these reasons, a prior art reference cannot anticipate the instant claim under Section 102 absent some predefined or standard servicing function.

Omitted Features

Appellants respectfully assert that the Derzay reference does not disclose all of the claimed features, such as the standard service function associated with the service request. However, in the Final Office Action, the Examiner argued:

Specifically, applicant’s attention is directed to member 206, Fig. 8 of the Derzay’s reference. There, Derzay clearly discloses a plurality of predefined function area listed in a Web page

menu [202, Fig. 8], to be selected by a field service user when he inputs a service request. The user can transmit his request with the selected function area information to the medical service center by pushing the button 216. Furthermore, Derzay discloses that his system provides other predefined function utilities, for example the service History Reporting (220), System Usage (224), Tube Usage, System activity Monitoring (226), as listed in the Web page menu of 218, Fig. 9 [see col. 14, lines 50-63], or those predefined medical software service image protocols as shown by Fig. 11 via the Web page menu 236.

Paper 16, Pages 7-8.

First, the Appellants respectfully submit that the Examiner mischaracterized the service request page (202, Fig. 8) and the 'problem area' selections (206, Fig. 8) of the Derzay reference. The Appellants emphasize that the member 206 referenced by the Examiner is *neither a function nor a service*, much less a predefined or standard service function as recited in claim 1. Instead, the Derzay reference actually discloses 206 as a series of interactive selections 206, which permit the user to *identify* the general problem area that may be occurring at the system. *See* Derzay, Fig. 8; Col. 14, lines 3-5. As disclosed, these selections 206 are merely *broad categories* of problem areas, which do not even indicate the specific problem much less a servicing function to address the problem. *See id.* It would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *broad identifiers* as a standard service function, as recited in claim 1. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

With further reference to Fig. 8, the Derzay reference clearly illustrates these interactive selections 206 on a *custom* service request page 202 as a number of *problem areas*, such as prescription, acquisition, display, archival, filming, networking, image quality, and other. *See id.* In view of these listed problem areas, Appellants emphasize the *broad categorical and non-functional* nature of the selections 206. A *problem area* cannot be equated with a *function*, much less the actual problem or a standard servicing function to address the actual problem. The Appellants also note that the service request page 202 illustrated in Fig. 8 includes additional *custom* service request *identifiers*, such as a problem description text box 212. *See* Derzay, Fig. 8; Col. 14, lines 19-21. At box 212, in conjunction with the broad problem area 206, a user can describe the actual problem in a *customized* manner (not standard). *See id.* However, neither the problem area 206 nor the problem description text box 212 identifies any service function, much less a standard service function. *See id.* Again, it would be unreasonable to interpret the drawings as disclosing anything other than a *custom* service request and accompanying problem area identifiers and custom problem descriptions. *See In re Aslanian*, 590 F.2d 911, 200 U.S.P.Q. 500 (CCPA 1979).

Second, the Examiner mischaracterized the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11. As disclosed, the system report page 218 only operates as a means for *informing the user* of a variety of system information, such as service history 220, system usage 224, tube usage 228, and monitoring 226. *See* Derzay, Fig. 9; Col. 14, lines 33-36, 46-49. No service function, much less a standard service function, is involved with this simple informational reporting. Moreover, a user does not identify this information along with a service request, much less a standard service request. The system report page 218 is neither a part of the service request page 202, nor is it intended to operate as a feature of a service request. As described above, the service request page 202 merely provides for *custom* entry of a problem description 212 for a general problem area 206. Again, it would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *informational reports* as a standard service function associated with a service request, as recited in claim 1. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

Regarding the protocol screen 236 of Fig. 11, the Appellants emphasize that Derzay clearly defines the term *protocol* as instructions or parameters for acquiring, manipulating, displaying, archiving, or managing medical diagnostic data. *See* Derzay, Fig. 11; Col. 15, lines 36-40. As explicitly disclosed by Derzay, the protocol screen 236 lists a series of imaging protocols within the text area 238, which provides a description 240 and a sample image 242 for each different protocol. *See* Derzay, Fig. 11; Col. 15, lines 51-59. Appellants submit that the disclosed protocols are completely unrelated to any service requests or servicing functions, much less a standard servicing function. Again, it would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *protocols* as a standard service function associated with a service request, as recited in claim 1. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

Third, the Appellants note that the Examiner ironically appears to be taking “a piece-meal analysis of the reference,” rather than the Appellants as suggested by the Examiner. *See* Paper 16, Page 8, Paragraph 19. As discussed above, the pages 202, 218, and 236 are each separate and distinct pages, which have unrelated functions. Moreover, each of these pages 202, 218, and 236 lacks any standard service function, particularly one related to a service request. Appellants reiterate that Derzay must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989). Here, the standard service function is missing from each of the pages 202, 218, and 236. Appellants also note that the Examiner’s piece-meal analysis of Derzay is akin to hindsight reconstruction, which for a case of obviousness, is completely improper. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

In view of the omitted features of a standard service function associated with a service request, *inter alia*, the Derzay reference cannot anticipate claim 1.

Omitted Features are NOT Inherent

In view of the foregoing deficiencies, the Appellants further submit that the omitted features are not inherent to the Derzay reference.

First, regarding the service request page 202, the Appellants believe the Examiner's interpretation of the problem areas 206 is based on *mere possibilities* and *unreasonable assumptions*. It *does not necessarily flow* from Derzay's disclosure of problem areas 206 that a standard service function would or could accompany the otherwise custom service request page 202. In fact, the *custom* problem description text box 212 is antithetical to such an unsupported possibility. For this reason, Appellants submit that the Derzay reference neither explicitly nor inherently discloses a standard service function associated with a service request, as recited in claim 1.

Second, regarding the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11, the Appellants believe the Examiner's interpretation is even more egregious, because these pages/screens are not even related to the service request much less a service function. An interpretation of these features as standard service functions is nothing more than a *mere possibility*. As discussed above, the system report page 218 provides only informational reports, while the protocol screen 236 provides only software protocols for normal operation of the imaging system. These are separate and distinct from the service request page 202, which provides only *custom* service requests. Based on these much different and separate pages 202, 218, and 236, each of which lacks a standard service function, it *does not necessarily flow* that a standard service function would or could be identified along with a service request. For this reason, Appellants submit that the Derzay reference neither explicitly nor inherently discloses a standard service function associated with a service request, as recited in claim 1.

Request Withdrawal of Rejection of Claims 1-7

In view of these omitted features, the Derzay reference cannot anticipate the pending claims. For these reasons, Appellants respectfully request withdrawal of the foregoing rejection of claims 1-7 under 35 U.S.C. 102(e) as anticipated by the Derzay reference.

GROUP II: Independent Claim 8 and Dependent Claims 9-15

Claims

In view of the foregoing legal precedent and summary of problems and solutions provided by the present application, independent claim 8 recites:

A system for accessing operational data from a medical diagnostic station, the system comprising:

an *automated service facility* including a server configured to recognize and execute a plurality of *predefined service functions*, the service functions each including accessing operational data for a medical diagnostic station; and

a field service unit configured to be coupled to the automated service facility via a network link, to generate *service requests*, and to transmit the service requests to the automated service facility for operational servicing of the medical diagnostic station, *each service request including identification of a predefined service function* and an identification of at least one medical diagnostic station.

As set forth above, claim 8 is clearly directed toward an *automated service facility* recognizing and executing a *predefined service function* associated with a *service request*. In context of the claim as a whole, the claim feature of a “predefined service function” clearly refers to a *function* associated with *automatic servicing* of the medical diagnostic station and, more particularly, a *predefined function* for automatically servicing in which operational data is specifically accessed according to the predefined service function. Appellants also reiterate that the claim features, including the predefined service function, must be interpreted reasonably and consistently within the scope of the specification and within the understanding of one of ordinary skill in the art. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969). For these reasons, a prior art reference cannot anticipate the instant claim under Section 102 absent some predefined servicing function associated with a service request and automated servicing.

Omitted Features

Appellants respectfully assert that the Derzay reference does not disclose all of the claimed features, such as the predefined service function associated with the service request and automated servicing.

First, as discussed above with reference to independent claim 1, the Appellants respectfully submit that the Examiner mischaracterized the service request page (202, Fig. 8) and the ‘problem area’ selections (206, Fig. 8) of the Derzay reference. The Appellants emphasize that the member 206 referenced by the Examiner is *neither a function nor a service*, much less a predefined service function as recited in claim 8. Instead, the Derzay reference actually discloses 206 as a series of interactive selections 206, which permit the user to *identify* the general problem area that may be occurring at the system. *See Derzay*, Fig. 8; Col. 14, lines 3-5. As disclosed, these selections 206 are merely *broad categories* of problem areas, which do not even indicate the

specific problem much less a servicing function to address the problem. *See id.* It would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *broad identifiers* as a predefined service function, as recited in claim 8. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

With further reference to Fig. 8, the Derzay reference clearly illustrates these interactive selections 206 on a *custom* service request page 202 as a number of *problem areas*, such as prescription, acquisition, display, archival, filming, networking, image quality, and other. *See id.* In view of these listed problem areas, Appellants emphasize the *broad categorical and non-functional* nature of the selections 206. A *problem area* cannot be equated with a *function*, much less the actual problem or a predefined servicing function to address the actual problem. The Appellants also note that the service request page 202 illustrated in Fig. 8 includes additional *custom* service request *identifiers*, such as a problem description text box 212. *See Derzay*, Fig. 8; Col. 14, lines 19-21. At box 212, in conjunction with the broad problem area 206, a user can describe the actual problem in a *customized* manner (not standard). *See id.* However, neither the problem area 206 nor the problem description text box 212 identifies any service function, much less a predefined service function. *See id.* Again, it would be unreasonable to interpret the drawings as disclosing anything other than a *custom* service request and accompanying problem area identifiers and custom problem descriptions. *See In re Aslanian*, 590 F.2d 911, 200 U.S.P.Q. 500 (CCPA 1979).

Second, the Examiner mischaracterized the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11. As disclosed, the system report page 218 only operates as a means for *informing the user* of a variety of system information, such as service history 220, system usage 224, tube usage 228, and monitoring 226. *See Derzay*, Fig. 9; Col. 14, lines 33-36, 46-49. Moreover, the Appellants emphasize that Derzay clearly defines the term *protocol* as instructions or parameters for acquiring, manipulating, displaying, archiving, or managing medical diagnostic data. *See Derzay*, Fig. 11; Col. 15, lines 36-40. No service function, much less a predefined service function, is involved with this simple informational reporting 218 or provision of protocols 236. These pages 218 and 236 are neither a part of the service request page 202, nor are they intended to operate as a feature of a service request. As described above, the service request page 202 merely provides for *custom* entry of a problem description 212 for a general problem area 206. Again, it would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *informational reports* and *protocols* as a predefined service function associated with a service request, as recited in claim 8. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

Third, the Appellants note that independent claim 8 further recites the *automated service facility* associated with the predefined service functions and service requests. In contrast, the Derzay reference contemplates *manual handling* of service requests by an engineer. See Derzay et al., element 310, Fig. 13; column 19, lines 6-12. In fact, given that Derzay is devoid of any standard service function, the service requests cannot be handled automatically and, thus, each custom request must be evaluated and handled manually by an engineer. For example, the provision of the problem description text box 212 precludes any sort of automation, because the problem description is different/custom for each individual service request. See Derzay, Fig. 8; Col. 14, lines 19-21. Accordingly, an engineer would need to evaluate the description 212 before any sort of servicing function could even be recognized, much less executed to correct the problem.

In view of the omitted features of a predefined service function associated with a service request and automated service facility, *inter alia*, the Derzay reference cannot anticipate claim 8.

Omitted Features are NOT Inherent

In view of the foregoing deficiencies, the Appellants further submit that the omitted features are not inherent to the Derzay reference.

First, regarding the service request page 202, the Appellants believe the Examiner's interpretation of the problem areas 206 is based on *mere possibilities* and *unreasonable assumptions*. It *does not necessarily flow* from Derzay's disclosure of problem areas 206 that a predefined service function would or could accompany the otherwise custom service request page 202. In fact, the *custom* problem description text box 212 is antithetical to such an unsupported possibility. For this reason, Appellants submit that the Derzay reference neither explicitly nor inherently discloses a predefined service function associated with a service request, as recited in claim 8.

Second, regarding the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11, the Appellants believe the Examiner's interpretation is even more egregious, because these pages/screens are not even related to the service request much less a service function. An interpretation of these features as predefined service functions is nothing more than a *mere possibility*. As discussed above, the system report page 218 provides only informational reports, while the protocol screen 236 provides only software protocols for normal operation of the imaging system. These are separate and distinct from the service request page 202, which provides only *custom* service requests. Based on these much different and separate pages 202, 218, and 236, each of which lacks a predefined service function, it *does not necessarily flow* that a predefined service function would or could be identified along with a service request. For this reason, Appellants submit that the

Derzay reference neither explicitly nor inherently discloses a predefined service function associated with a service request, as recited in claim 8.

Third, regarding the claimed “automated service facility,” the Appellants reiterate that automation is not workable with the custom problem descriptions 212 provided by the service request page 202. It would be *unreasonable and inconsistent* with the disclosure of Derzay to assume that the service requests are automatically recognized and handled by the service facility 22. Moreover, the *mere possibility* that the service facility 22 could be automated *does not necessarily flow* from the teachings of Derzay. Accordingly, the Appellants submit that automation is neither explicit nor inherent to the service facility 22.

Request Withdrawal of Rejection of Claims 8-15

In view of these omitted features, the Derzay reference cannot anticipate the pending claims. For these reasons, Appellants respectfully request withdrawal of the foregoing rejection of claims 8-15 under 35 U.S.C. 102(e) as anticipated by the Derzay reference.

GROUP III: Independent Claim 16 and Dependent Claims 17-22

Claims

In view of the foregoing legal precedent and summary of problems and solutions provided by the present application, independent claim 16 recites:

A method for remotely obtaining operational data from a medical diagnostic station, the method comprising the steps of:

composing a service request on a field service unit, the service request *including identification of a service function from a plurality of predefined service functions* and a medical diagnostic system of interest, the service request relating to operational servicing of the medical diagnostic system;

transmitting the service request to an *automated service facility*;

accessing operational data from the medical diagnostic system of interest via the automated service facility as defined by the at least one service function; and

transmitting data based on the accessed data from the automated service facility to the field service unit.

As set forth above, claim 16 is clearly directed toward a predefined service function identified while composing a *service request*, which is transmitted to an automated service facility. In context of the claim as a whole, the claim feature of a “predefined service function” clearly refers to a function associated with automatic servicing of the medical diagnostic system and, more particularly, a predefined function for automatically servicing in which operational data is specifically accessed and transmitted according to the predefined service function. Appellants also reiterate that the claim features, including the predefined service function, must be interpreted reasonably and

consistently within the scope of the specification and within the understanding of one of ordinary skill in the art. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969). For these reasons, a prior art reference cannot anticipate the instant claim under Section 102 absent some predefined servicing function identified with a service request, which is transmitted to an automated service facility for automatic handling.

Omitted Features

Appellants respectfully assert that the Derzay reference does not disclose all of the claimed features, such as the predefined service function identified with the service request and transmitted to the automated service facility for automatic handling.

First, as discussed in detail above, the Appellants reiterate that the Examiner mischaracterized the service request page (202, Fig. 8) and the 'problem area' selections (206, Fig. 8) of the Derzay reference. The Appellants emphasize that the member 206 referenced by the Examiner is *neither a function nor a service*, much less a predefined service function as recited in claim 16. As disclosed, these selections 206 are merely *broad categories* of problem areas, which do not even indicate the specific problem much less a servicing function to address the problem. *See Derzay*, Fig. 8; Col. 14, lines 3-5. The Appellants also note that the problem description text box 212 is clearly intended for a description of the problem in a *customized* manner. *See Derzay*, Fig. 8; Col. 14, lines 19-21. However, this customized problem description 212 is antithetical to a predefined service function. It would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *broad identifiers* and *problem descriptions* as a predefined service function, as recited in claim 16. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969). Moreover, it would be unreasonable to interpret the drawings as disclosing anything other than a *custom* service request and accompanying problem area identifiers and custom problem descriptions. *See In re Aslanian*, 590 F.2d 911, 200 U.S.P.Q. 500 (CCPA 1979).

Second, the Appellants further reiterate that the Examiner mischaracterized the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11. As disclosed, the system report page 218 only operates as a means for *informing the user* of a variety of system information. *See Derzay*, Fig. 9; Col. 14, lines 33-36, 46-49. Moreover, the Appellants emphasize that Derzay clearly defines the term *protocol* as instructions or parameters for acquiring, manipulating, displaying, archiving, or managing medical diagnostic data. *See Derzay*, Fig. 11; Col. 15, lines 36-40. No service function, much less a predefined service function, is involved with this simple informational reporting 218 or provision of protocols 236. Again, it would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these

informational reports and protocols as a predefined service function associated with a service request, as recited in claim 16. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

Third, the Appellants stress that independent claim 16 further recites the *automated service facility* associated with the predefined service functions and service requests. In contrast, the Derzay reference contemplates *manual handling* of service requests by an engineer. *See Derzay et al.*, element 310, Fig. 13; column 19, lines 6-12. Significantly, the provision of the problem description text box 212 precludes any sort of automation, because the problem description is different/custom for each individual service request. *See Derzay*, Fig. 8; Col. 14, lines 19-21. Accordingly, an engineer would need to evaluate the description 212 before any sort of servicing function could be identified or handled.

In view of the omitted features of a predefined service function identified with a service request and transmitted to an automated service facility, *inter alia*, the Derzay reference cannot anticipate claim 16.

Omitted Features are NOT Inherent

In view of the foregoing deficiencies, the Appellants further submit that the omitted features are not inherent to the Derzay reference.

First, regarding the service request page 202, the Appellants believe the Examiner's interpretation of the problem areas 206 is based on *mere possibilities* and *unreasonable assumptions*. *It does not necessarily flow* from Derzay's disclosure of problem areas 206 that a predefined service function would or could accompany the otherwise custom service request page 202.

Second, regarding the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11, the Appellants believe the Examiner's interpretation is even more egregious, because these pages/screens are not even related to the service request much less a service function. An interpretation of these features as predefined service functions is nothing more than a *mere possibility*. As discussed above, the system report page 218 provides only informational reports, while the protocol screen 236 provides only software protocols for normal operation of the imaging system. These are separate and distinct from the service request page 202, which provides only *custom* service requests. Based on these much different and separate pages 202, 218, and 236, each of which lacks a predefined service function, *it does not necessarily flow* that a predefined service function would or could be identified along with a service request.

Third, regarding the claimed “automated service facility,” the Appellants reiterate that automation is not workable with the custom problem descriptions 212 provided by the service request page 202. It would be *unreasonable and inconsistent* with the disclosure of Derzay to assume that the service requests are automatically recognized and handled by the service facility 22.

For these reasons, Appellants submit that the Derzay reference does not inherently disclose the foregoing features, as recited in claim 16.

Request Withdrawal of Rejection of Claims 16-22

In view of these omitted features, the Derzay reference cannot anticipate the pending claims. For these reasons, Appellants respectfully request withdrawal of the foregoing rejection of claims 16-22 under 35 U.S.C. 102(e) as anticipated by the Derzay reference.

GROUP IV: Independent Claim 23 and Dependent Claims 24-28

Claims

In view of the foregoing legal precedent and summary of problems and solutions provided by the present application, independent claim 23 recites:

A method for providing remote service to a plurality of medical diagnostic systems, the method comprising the steps of:

- establishing a *menu of predefined service functions*;
- composing a *service request* on a field service unit for operational servicing of a medical diagnostic system of interest, the *service request including identification of at least one of the predefined service functions* and the medical diagnostic system of interest;
- transmitting the service request to an *automated service facility*;
- executing the service function for the medical diagnostic system of interest; and
- transmitting a response message to the field service unit.

Again, claim 23 is clearly directed toward a predefined service function identified while composing a *service request*, which is transmitted to an automated service facility. In context of the claim as a whole, the claim feature of a “predefined service function” clearly refers to a function associated with automatic servicing of the medical diagnostic system and, more particularly, a predefined function for automatically servicing in which operational data is specifically accessed and transmitted according to the predefined service function. For these reasons, and with reference to the discussion of claim 16 above, a prior art reference cannot anticipate the instant claim under Section 102 absent some predefined servicing function identified with a service request, which is transmitted to an automated service facility for automatic handling.

Omitted Features

Appellants respectfully assert that the Derzay reference does not disclose all of the claimed features, such as the predefined service function identified with the service request and transmitted to the automated service facility for automatic handling.

First, as discussed in detail above, the Appellants reiterate that the Examiner mischaracterized the service request page (202, Fig. 8) and the 'problem area' selections (206, Fig. 8) of the Derzay reference. The Appellants emphasize that the member 206 referenced by the Examiner is *neither a function nor a service*, much less a predefined service function as recited in claim 23. As disclosed, these selections 206 are merely *broad categories* of problem areas, which do not even indicate the specific problem much less a servicing function to address the problem. *See* Derzay, Fig. 8; Col. 14, lines 3-5. The Appellants also note that the problem description text box 212 is clearly intended for a description of the problem in a *customized* manner. *See* Derzay, Fig. 8; Col. 14, lines 19-21. However, this customized problem description 212 is antithetical to a predefined service function. Appellants also note that the service request page 202 does not provide any sort of *menu* of functions, much less one pertaining to predefined service functions. It would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *broad identifiers* and *problem descriptions* as a menu of predefined service functions, as recited in claim 23. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969). Moreover, it would be unreasonable to interpret the drawings as disclosing anything other than a *custom* service request. *See In re Aslanian*, 590 F.2d 911, 200 U.S.P.Q. 500 (CCPA 1979).

Second, the Appellants further reiterate that the Examiner mischaracterized the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11. As disclosed, the system report page 218 only operates as a means for *informing the user* of a variety of system information. *See* Derzay, Fig. 9; Col. 14, lines 33-36, 46-49. Moreover, the Appellants emphasize that Derzay clearly defines the term *protocol* as instructions or parameters for acquiring, manipulating, displaying, archiving, or managing medical diagnostic data. *See* Derzay, Fig. 11; Col. 15, lines 36-40. No service function, much less a predefined service function, is involved with this simple informational reporting 218 or provision of protocols 236. Again, it would be unreasonable and inconsistent with the present specification and the understanding of one of ordinary skill in the art to interpret these *informational reports* and *protocols* as a predefined service function associated with a service request, as recited in claim 23. *See In re Prater*, 415 F.2d 1393, 1404-05 (C.C.P.A. 1969).

Third, the Appellants stress that independent claim 23 further recites the *automated service facility* associated with the predefined service functions and service requests. In contrast, the Derzay reference

contemplates *manual handling* of service requests by an engineer. See Derzay et al., element 310, Fig. 13; column 19, lines 6-12. Significantly, the provision of the problem description text box 212 precludes any sort of automation, because the problem description is different/custom for each individual service request. See Derzay, Fig. 8; Col. 14, lines 19-21. Accordingly, an engineer would need to evaluate the description 212 before any sort of servicing function could be identified or handled.

In view of the omitted features of a predefined service function identified with a service request and transmitted to an automated service facility, *inter alia*, the Derzay reference cannot anticipate claim 23.

Omitted Features are NOT Inherent

In view of the foregoing deficiencies, the Appellants further submit that the omitted features are not inherent to the Derzay reference.

First, regarding the service request page 202, the Appellants believe the Examiner's interpretation of the problem areas 206 is based on *mere possibilities* and *unreasonable assumptions*. It does not necessarily flow from Derzay's disclosure of problem areas 206 that a predefined service function would or could accompany the otherwise custom service request page 202.

Second, regarding the system report page 218 of Fig. 9 and the protocol screen 236 of Fig. 11, the Appellants believe the Examiner's interpretation is even more egregious, because these pages/screens are not even related to the service request much less a service function. An interpretation of these features as predefined service functions is nothing more than a *mere possibility*. As discussed above, the system report page 218 provides only informational reports, while the protocol screen 236 provides only software protocols for normal operation of the imaging system. These are separate and distinct from the service request page 202, which provides only *custom* service requests. Based on these much different and separate pages 202, 218, and 236, each of which lacks a predefined service function, it *does not necessarily flow* that a predefined service function would or could be identified along with a service request.

Third, regarding the claimed "automated service facility," the Appellants reiterate that automation is not workable with the custom problem descriptions 212 provided by the service request page 202. It would be *unreasonable and inconsistent* with the disclosure of Derzay to assume that the service requests are automatically recognized and handled by the service facility 22.

10. **APPENDIX OF CLAIMS ON APPEAL**

1. (Previously Presented) A system for providing field service to medical diagnostic equipment, the system comprising:

a medical diagnostic station configured to store medical image data;

a field service unit configured to generate service requests for operational servicing of the medical diagnostic station, identifying a standard service function from a plurality of service functions and a unique identifier for the medical diagnostic station; and

a service facility configured to be coupled to the medical diagnostic station and to the field service unit via network links, the service facility including a service request management device for receiving the service requests from the field service unit, accessing data stored at the medical diagnostic station as defined by the standard service function, and transmitting data to the field service unit in response to the service request.

2. (Original) The system of claim 1, comprising a plurality of medical diagnostic stations of different modalities, and wherein the standard service functions of the service requests include modality-specific functions.

3. (Original) The system of claim 1, wherein the field service unit is configured to transmit the service request via an electronic message to the service facility, and the service facility is configured to transmit the data to the field service unit via an electronic response message.

4. (Original) The system of claim 1, wherein the service facility is configured to verify consistency between components of the service requests received from the field service unit prior to accessing the data from the medical diagnostic system.

5. (Previously Presented) The system of claim 1, further comprising at least one database for storing historical service data for the diagnostic station, and wherein the service facility is configured to access the historical service data for response to the service request from the field service unit.

6. (Original) The system of claim 1, wherein the service facility is configured to receive the service request, access the data from the diagnostic system and transmit the data to the field service unit automatically and without operator intervention.

7. (Original) The system of claim 1, wherein the plurality of service functions are defined by a list on the field service unit.

8. (Previously Presented) A system for accessing operational data from a medical diagnostic station, the system comprising:

an automated service facility including a server configured to recognize and execute a plurality of predefined service functions, the service functions each including accessing operational data for a medical diagnostic station; and

a field service unit configured to be coupled to the automated service facility via a network link, to generate service requests, and to transmit the service requests to the automated service facility for operational servicing of the medical diagnostic station, each service request including identification of a predefined service function and an identification of at least one medical diagnostic station.

9. (Original) The system of claim 8, wherein the automated service facility is configured to establish a network link with a medical diagnostic station identified in a service request received from the field service unit, and to access operational data from the medical diagnostic station in accordance with a service function identified in the service request.

10. (Original) The system of claim 8, wherein the automated service facility is coupled to at least one database and access the operational data at least partially from the at least one database.

11. (Original) The system of claim 8, wherein the server is configured to transmit service data to the field service unit in response to the service request after executing the service function identified in the service request.

12. (Original) The system of claim 8, wherein the predefined service functions include modality-specific functions.

13. (Original) The system of claim 12, wherein the predefined service functions include functions specific to magnetic resonance imaging systems.

14. (Previously Presented) The system of claim 12, wherein the predefined service functions include functions specific to computed tomography imaging systems.

15. (Original) The system of claim 12, wherein the predefined service functions include functions specific to x-ray imaging systems.

16. (Previously Presented) A method for remotely obtaining operational data from a medical diagnostic station, the method comprising the steps of:

composing a service request on a field service unit, the service request including identification of a service function from a plurality of predefined service functions and a medical diagnostic system of interest, the service request relating to operational servicing of the medical diagnostic system;

transmitting the service request to an automated service facility;

accessing operational data from the medical diagnostic system of interest via the automated service facility as defined by the at least one service function; and

transmitting data based on the accessed data from the automated service facility to the field service unit.

17. (Original) The method of claim 16, comprising the further step of verifying the service request at the automated service facility prior to accessing the operational data.

18. (Original) The method of claim 17, wherein the step of verifying includes verifying that the service function identified in the service request is valid for the medical diagnostic system of interest.

19. (Original) The method of claim 16, wherein the operational data is accessed from the medical diagnostic system of interest.

20. (Original) The method of claim 16, wherein the data is transmitted to the field service unit via an electronic message stored on an electronic message server.

21. (Original) The method of claim 16, wherein the step of composing a service request includes the step of selecting a service function from a menu of the plurality of predefined service functions.

22. (Original) The method of claim 16, wherein the plurality of predefined service functions includes at least one service function common to a plurality of medical diagnostic system modalities.

23. (Previously Presented) A method for providing remote service to a plurality of medical diagnostic systems, the method comprising the steps of:

establishing a menu of predefined service functions;

composing a service request on a field service unit for operational servicing of a medical diagnostic system of interest, the service request including identification of at least one of the predefined service functions and the medical diagnostic system of interest;

transmitting the service request to an automated service facility;

executing the service function for the medical diagnostic system of interest; and

transmitting a response message to the field service unit;

24. (Original) The method of claim 23, wherein the menu of predefined service functions includes functions specific to a desired medical diagnostic system modality.

25. (Original) The method of claim 23, comprising the further step of verifying validity of the service function identified in the service request for the medical diagnostic system of interest.

26. (Original) The method of claim 23, wherein the automated service facility is configured to receive the service request, execute the service function and transmit the response message without operator intervention.

27. (Original) The method of claim 23, wherein the step of executing the service function includes establishing a network link between the automated service facility and the medical diagnostic system of interest and transmitting operational data from the medical diagnostic system of interest to the automated service facility.

28. (Original) The method of claim 23, wherein the response message includes a report of results of the service function.